

What is claimed is:

1. A method for printing wallpaper onto a web of media, comprising the steps of:
utilizing an on-demand printer comprising a cabinet in which is located a media path which extends
5 from a media loading area to a winding area, there being a printhead located in the media path, a
processor which accepts operator inputs from one or more input devices;
using one or more input devices which communicate with the processor to capture data from an
operator regarding a specification for an operator's requirements;
using the processor to operatively control the printer according to the data; and
10 printing a single roll of wallpaper, on demand, according to a selected pattern.
2. The method of claim 1, further comprising the step of:
representing the pattern as a symbol which can be captured as the data by an input device which
communicates with the processor.
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3. The method of claim 1, further comprising the step of:
storing to a storage device accessible to the processor and internal to the cabinet, a plurality of
selectable files for describing patterns for printing onto the media.
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4. The method of claim 1, further comprising the step of:
providing the printer with a video display for depicting the selected pattern.
5. The method of claim 4, further comprising the step of:
25 using the video display as a touchscreen input device to capture operator preferences.
6. The method of claim 1, further comprising the step of:
providing the printer with a scanner for capturing data that specifies a selected pattern.
- 30 7. The method of claim 4, further comprising the step of:

using the video display to display information that relates to the configuration.

8. The method of claim 1, wherein:

printing a roll of wallpaper according to a selected pattern and the configuration further comprises

- 5 inserting a blank core into a winding area, in or on the printer and accessible to an operator;
winding the web onto the core after the web has been printed on; and
severing the wound core from the web.

9. The method of claim 8, wherein:

- 10 winding the web is performed by winding a length of a printed web onto the core;
the length being determined in advance;
the length being part of the configuration of the printer.

10. The method of claim 8, wherein:

- 15 the core is contained in a tote during the winding.

11. The method of claim 9, wherein:

winding the web is further performed by slitting the web, within the printer, to one or more specified widths prior to winding;

- 20 the one or more specified widths being a part of the printer configuration, having been communicated through one of the input devices.

12. The method of claim 1, further comprising the step of:

providing one or more collections of patterns;

- 25 each pattern in a collection having a symbol which can be used as an operator input.

13. The method of claim 1, wherein:

the specification for an operator's requirements comprises a pattern and the configuration;

the configuration being one or more parameters selected from the group comprising: roll length, a roll

- 30 slitting arrangement, one or more modifications to the pattern, or a selection of media to be printed on.

14. The method of claim 1, wherein utilizing an on-demand printer further comprises:

loading a media cartridge into the printer, the cartridge containing a unprinted web of media; and

using a motor in the printer to advance the unprinted web into the path;

5 automatically threading the media from the loading area, to the winding area.

15. The method of claim 1, wherein utilizing an on-demand printer further comprises:

loading a media tote into the winding area;

winding a printed roll of wallpaper onto a core inside the tote; and

10 severing the printed roll on the core from the web.

16. The method of claim 1, wherein utilizing an on-demand printer further comprises:

loading an empty core into the winding area;

winding a printed roll of wallpaper onto a core; and

15 severing the printed roll on the core from the web using an automated cutting mechanism inside the printer, the cutting mechanism receiving a signal for commencing cutting from the processor.

17. The method of claim 1, wherein printing a roll of wallpaper according to a selected pattern further comprises:

20 using a full width, stationary color printhead to print onto the web while it is in motion along the path.

18. The method of claim 17, further comprising the step of:

drying the web after it is printed on but before it is dispensed by the printer.

25 19. The method of claim 18, wherein drying further comprises:

admitting the printed web into a compartment in an internal dryer and exposing the web to a stream of heated air.

20. The method of claim 17, further comprising the step of:

30 heating the web with a pre-heater platen located under the path before the web passes the printhead.

21. A method as claimed in claim 1 wherein the web of blank media is printed by the printhead at a rate exceeding 0.02 square meters per second (775 square feet per hour)"
- 5 22. A method as claimed in claim 1 wherein the web of blank media is printed by the printhead at a rate exceeding 0.1 square meters per second (3875 square feet per hour)"
23. A method as claimed in claim 1 wherein the web of blank media is printed by the printhead at a rate exceeding 0.2 square meters per second (7750 square feet per hour)"
- 10 24. A method as claimed in claim 1 wherein the printhead has more than 7680 nozzles
25. A method as claimed in claim 1 wherein the printhead has more than 20,000 nozzles
- 15 26. A method as claimed in claim 1 wherein the printhead has more than 100,000 nozzles
27. A method as claimed in claim 1 wherein the printhead has more than 250,000 nozzles
- 20 28. A method as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 5 picoliters
- 25 29. A method as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 3 picoliters
- 30 30. A method as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 1.5 picoliters.
31. A method as claimed in claim 1 wherein the printer is a self contained printer for producing rolls of wallpaper, the printer comprising:
- a cabinet in which is located a media path which extends from a media cartridge loading area to a winding area;
- a full width digital color printhead located in the media path;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

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32. A method as claimed in claim 1 wherein utilizing an on-demand printer further comprises:

loading a media cartridge into the printer, the media cartridge, comprising:

a case in which a roll of blank media may be deployed;

the case having two halves, hinged together, an area between the two halves, when closed, defining a

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media supply slot; and

the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor.

33. A method as claimed in claim 1 further comprising the step of providing a consumer tote for

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carrying the roll of wallpaper, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings; and

the tote having an interior in which is located a disposable core which is aligned with the access openings.

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34. A method as claimed in claim 1 wherein the printer has a transverse cutter, the transverse cutter comprising:

a chassis having end plates;

the end plates being separated to allow a web of media to pass between them;

the end plates supporting between them a cutting blade; and

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the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an opposite side of the web.

35. A method as claimed in claim 1 wherein the printer has a slitting mechanism, the slitting mechanism comprising:

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a chassis having end plates;

the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them;

one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitte having a cutting edge; and

- 5 the slitting mechanism selectively engageable to either enter or not enter a path followed by the web according to an input provided by an operator of the printer.

36. A method as claimed in claim 1 wherein the printer has a dryer, the dryer comprising:

a compartment with a top opening for receiving a media web fed from the printer;

- 10 a source of heated air located above the top opening for blowing heated air into the opening to dry printing on the media web.

37. A method as claimed in claim 1 wherein the printer comprises:

a cabinet in which is located a media path which extends from a media loading area to a winding area;

- 15 a printhead located in the media path;

a processor which accepts operator inputs from one or more input devices which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein,

- 20 the length and design of the roll are determined by the operator inputs.

38. A method as claimed in claim 1 further comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

- 25 using one or more printer input devices which communicate with a processor to capture data regarding one or more customer's requirements;

the data comprising at least a customer selected pattern;

printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern;

and

- 30 charging a customer for the roll.

39. A method as claimed in claim 1 for operating a wallpaper printing franchise, further comprising the steps of:

providing to franchisees, an on-demand printer comprising a cabinet in which is located a media path

5 which extends from a media loading area to a printhead and from the printhead to a dispensing slot; the printer having one or more printer input devices which communicate with a processor to capture data regarding one or more customer requirements, the data comprising at least a customer selected pattern;

10 providing the franchisee with a collection of patterns in a digital storage medium that can be read by the printer;

enabling the franchisee to print a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and

obtaining or attempting to obtain a fee from the franchisee.

15 40. A method as claimed in claim 1 wherein the printer comprises:

a frame in which is located a media path which extends from a media loading area to a winding area;

a printhead located across the media path;

one or more input devices for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a

20 particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

25 41. A method as claimed in claim 1 for printing wallpaper onto a web of media further comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path, there being a full width printhead located across the media path, there being a processor which accepts operator inputs from one or more input devices and which controls the printer;

30 using one or more input devices which communicate with the processor to capture data from an operator regarding a specification;

running the printer according to the data;
 printing a single roll of wallpaper, on demand, according to a selected pattern and configuration;
 changing the pattern according to a new datum from an operator; and
 then printing a new roll onto the same web.

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42. A method as claimed in claim 1 for drying the moving web of media in the printer, the method further comprising the steps of:

loading the web in a path that traverses a compartment in a dryer within the printer, the compartment having an opening across the top;

10 allowing the moving web to descend into the compartment, as required; and
 blowing heated air from above the opening.

43. A method as claimed in claim 1 for supplying the media web to the wallpaper printer, the method further comprising the steps of:

15 opening a reusable case;

placing into the case a core onto which has been located a supply roll of blank wallpaper media;

supporting the core for rotation within the case;

leading a free edge of the roll between a pair of rollers and past an edge of the open case; then

with the rollers located within the case and on either side of the web, closing the case and loading it

20 into a printer.

44. A method as claimed in claim 1 wherein the printer has a printhead assembly which prints onto a moving web that follows a path, the assembly comprising:

a full width printhead located across the path;

25 the printhead comprising a color printhead which is at least as wide as the web;

the printhead being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes.

45. A method as claimed in claim 1 wherein the printer further comprises:

a housing in which is located a media path which extends from a blank media intake to a wallpaper exit slot;

a multi-color roll width removable printhead located in the housing and across the media path;

the printhead being supplied by separate ink reservoirs, the reservoirs connected to the printhead by a

5 an ink supply harness, there being a disconnect coupling between the reservoirs and the printhead;

one or more input devices for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll.

46. A method as claimed in claim 1 further comprising the step of providing a consumer tote for

10 carrying the roll of wallpaper, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings;

the tote having an interior in which is located a disposable core which is aligned with the access openings;

both openings exposing a moulded coupling, one coupling attached to each end of the core, at least one

15 of the couplings being a driven coupling and adapted to engage a driving spindle that rotates the core.

47. A method as claimed in claim 1 wherein the printer has a removable printhead assembly which prints onto a moving web, comprising:

a full width stationary printhead located on a rail along which it slides for service and removal;

20 a number of replaceable ink reservoirs which supply the printhead with different inks;

the printhead comprising a color printhead which is at least as wide as the web; and

the printhead being supplied with the different inks through tubes which can be disconnected so the printhead may be removed.

25 48. A method as claimed in claim 1 wherein the printer is a self threading printer for producing rolls of wallpaper, comprising:

a media loading area adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide;

a cabinet housing a media path which extends from the pilot guide to a printed media dispensing slot;

30 a printhead located across the media path;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll;

a motor within the cabinet for advancing a media web out of the media cartridge; and
one or more other motors adapted to urge the media along the path and out of the slot.

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49. A method as claimed in claim 1 for producing wallpaper on-demand, further comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which passes a printhead on the way to a dispensing slot;

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selecting a pattern and a configuration;

using one or more printer input devices which communicate with a processor to input the pattern and the configuration; and

printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern and configuration.

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